

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A method for enrolling for receipt of one or more obfuscated application programs, the method comprising:

issuing an enrollment request comprising a target ID, said enrollment request for receipt of one or more obfuscated executable application programs controlled by an application program provider, said target ID specifying a user device configured to execute said one or more obfuscated executable application programs for one or more services;

obtaining a secret in response to said issuing; and associating said secret with said application program provider, said secret for use in executing said one or more obfuscated executable application programs; and ~~received~~ receiving, from said application program provider following said obtaining, said one or more obfuscated executable application programs.

2. (Currently Amended) The method of claim 1 wherein said user device comprises a smart-card including a virtual machine (VM); and said target ID comprises a VM ID.

3. (Currently Amended) A method for enrolling for receipt of one or more obfuscated application programs, the method comprising:

receiving an enrollment request, from a user device, comprising a target ID, said enrollment request for receipt of access by a user device to one or more

obfuscated application programs, said target ID specifying said user device, said user device configured to execute said one or more obfuscated application programs;
determining a secret in response to said request;
associating said secret with said target ID following said determining and authentication of said enrollment request; and
transferring said secret to said user device.

4. (Original) The method of claim 3 wherein said determining and said transferring form part of a key exchange protocol.

5. (Currently Amended) The method of claim 3 wherein said user device comprises a smart-card including a virtual machine (VM); and
said target ID comprises a VM ID.

6. (Cancelled)

7. (Cancelled)

8. (Original) A method for application program obfuscation, the method comprising:
determining a current obfuscation method based at least in part on a target ID, said target ID specifying a user device configured to execute said obfuscated application program;
creating an obfuscated application program based at least in part on said current obfuscation method; and
sending said obfuscated application program to said user device.

9. (Original) The method of claim 8, further comprising receiving an application program request from said user device, said determining occurring in response to said receiving.

10. (Original) The method of claim 8 wherein
said method further comprises, after said creating,
applying a cryptographic process to said obfuscated
application program together with a cryptographic key to
create an encrypted obfuscated application program; and
said sending comprises sending said encrypted
obfuscated application program.

11. (Currently Amended) The method of claim 8 wherein
said user device comprises a smart-card including a
virtual machine (VM); and
said target ID comprises a VM ID.

12. (Currently Amended) A program storage device
readable by a machine, embodying a program of instructions
executable by the machine to perform a method for enrolling for
receipt of one or more obfuscated application programs, the
method comprising:

issuing an enrollment request comprising a target ID,
said enrollment request for receipt of one or more
obfuscated executable application programs controlled by
an application program provider, said target ID specifying
a user device configured to execute said one or more
executable obfuscated application programs for one or more
services;

obtaining a secret in response to said issuing; and
associating said secret with said application program
provider, said secret for use in executing said one or
more obfuscated executable application programs; and

~~received~~ receiving, from said application program provider following said obtaining, said one or more obfuscated executable application programs.

13. (Currently Amended) The program storage device of claim 12 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

14. (Currently Amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for enrolling for receipt of one or more obfuscated application programs, the method comprising:

receiving an enrollment request, from a user device, comprising a target ID, said enrollment request for receipt of access by a user device to one or more obfuscated application programs, said target ID specifying said user device, said user device configured to execute said one or more obfuscated application programs;

determining a secret in response to said request;

associating said secret with said target ID following said determining and authentication of said enrollment request; and

transferring said secret to said user device.

15. (Original) The program storage device of claim 14 wherein said determining and said transferring form part of a key exchange protocol.

16. (Currently Amended) The program storage device of claim 14 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

17. (Cancelled)

18. (Cancelled)

19. (Original) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method for application program obfuscation, the method comprising:

determining a current obfuscation method based at least in part on a target ID, said target ID specifying a user device configured to execute said obfuscated application program;

creating an obfuscated application program based at least in part on said current obfuscation method; and

sending said obfuscated application program to said user device.

20. (Original) The program storage device of claim 19, said method further comprising receiving an application program request from said user device, said determining occurring in response to said receiving.

21. (Original) The program storage device of claim 19 wherein

said method further comprises, after said creating, applying a cryptographic process to said obfuscated application program together with a cryptographic key to create an encrypted obfuscated application program; and

said sending comprises sending said encrypted obfuscated application program.

22. (Currently Amended) The program storage device of claim 19 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

23. (Currently Amended) An apparatus for enrolling for receipt of one or more obfuscated application programs, the method comprising:

means for issuing an enrollment request comprising a target ID, said enrollment request for receipt of one or more obfuscated executable application programs controlled by an application program provider, said target ID specifying a user device configured to execute said one or more obfuscated executable application programs for one or more services;

means for obtaining a secret in response to said issuing; and

associating said secret with said application program provider, said secret for use in executing said one or more obfuscated executable application programs; and

~~received~~ means for receiving, from said application program provider following said obtaining, said one or more obfuscated executable application programs.

24. (Currently Amended) The apparatus of claim 23 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

25. (Currently Amended) An apparatus for enrolling for receipt of one or more obfuscated application programs, the apparatus comprising:

means for receiving an enrollment request, from a user device, comprising a target ID, said enrollment request for receipt of access by a user device to one or more obfuscated application programs, said target ID specifying said user device, said user device configured to execute said one or more obfuscated application programs;

means for determining a secret in response to said request;

means for associating said secret with said target ID following said determining and authentication of said enrollment request; and

means for transferring said secret to said user device.

26. (Original) The apparatus of claim 25 wherein said determining and said transferring form part of a key exchange protocol.

27. (Currently Amended) The apparatus of claim 25 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

28. (Cancelled)

29. (Cancelled)

30. (Original) An apparatus for application program obfuscation, the apparatus comprising:

means for determining a current obfuscation method based at least in part on a target ID, said target ID specifying a user device configured to execute said obfuscated application program;

means for creating an obfuscated application program based at least in part on said current obfuscation method; and

means for sending said obfuscated application program to said user device.

31. (Original) The apparatus of claim 30, further comprising means for receiving an application program request from said user device, said determining occurring in response to said receiving.

32. (Original) The apparatus of claim 30 wherein said apparatus further comprises means for applying a cryptographic process to said obfuscated application program together with a cryptographic key to create an encrypted obfuscated application program, said means for applying responsive to said creating; and said means for sending comprises means for sending said encrypted obfuscated application program.

33. (Currently Amended) The apparatus of claim 30 wherein said user device comprises a smart-card including a virtual machine (VM); and said target ID comprises a VM ID.

34. (Currently Amended) An apparatus for enrolling for receipt of one or more obfuscated application programs, the apparatus comprising a deobfuscator configured to:

issue an enrollment request comprising a target ID, said enrollment request for receipt of one or more obfuscated executable application programs controlled by an application program provider, said target ID specifying a user device configured to execute said one or more obfuscated executable application programs;

obtain a secret in response to said issuing; and

associate said secret with said application program provider, said secret for use in executing said one or more obfuscated executable application programs; and

~~received~~ receive, from said application program provider following said obtaining, said one or more obfuscated executable application programs.

35. (Currently Amended) The apparatus of claim 34 wherein

said apparatus comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

36. (Currently Amended) An apparatus for enrolling for receipt of one or more obfuscated application programs, the apparatus comprising an obfuscator configured to:

receive an enrollment request, from a user device, comprising a target ID, said enrollment request for receipt of access by a user device to one or more obfuscated application programs, said target ID specifying said user device, said user device configured to execute said one or more obfuscated application programs;

determine a secret in response to said request;

associate said secret with said target ID following said determining and authentication of said enrollment request; and

transfer said secret to said user device.

37. (Original) The apparatus of claim 36 wherein said determining and said transferring form part of a key exchange protocol.

38. (Currently Amended) The apparatus of claim 36 wherein

said user device comprises a smart-card including a virtual machine (VM); and
said target ID comprises a VM ID.

39. (Cancelled)

40. (Cancelled)

41. (Original) An apparatus for application program obfuscation, the apparatus comprising an obfuscator configured to:

determine a current obfuscation method based at least in part on a target ID, said target ID specifying a user device configured to execute said obfuscated application program;

create an obfuscated application program based at least in part on said current obfuscation method; and

send said obfuscated application program to said user device.

42. (Original) The apparatus of claim 41, said obfuscator further configured to receive an application program request from said user device and perform said determining in response to said receiving.

43. (Original) The apparatus of claim 41 wherein

said obfuscator is further configured to apply a cryptographic process to said obfuscated application program together with a cryptographic key to create an encrypted obfuscated application program; and

said obfuscator is further configured to send said encrypted obfuscated application program.

44. (Currently Amended) The apparatus of claim 41 wherein

said user device comprises a smart-card including a virtual machine (VM); and

said target ID comprises a VM ID.

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Cancelled)